

M. Romberg, Measures of Companion of γ Andromedæ. 197

the rays of light of the large star were shut off, by being brought behind the dark ring.

The other two minute stars which he notices, are clearly fainter than that above described, but are distinctly visible with the 10-inch aperture in the absence of the large star from the field.

Mr. Romberg has also given his attention to the measurement of the triple star of γ Andromedæ, and has succeeded in obtaining some satisfactory results.

*Leyton, Essex,
24th March, 1863.*

Measures of the Small Star near Procyon.

By Hermann Romberg.

I determined the position of this small star, which was first seen by Mr. Gurney Barclay in the year 1856, in reference to Procyon.

1863, March 17	295 18	(6)		
18	295 40	(6)		
19	294 25.5	(6)	44.9	(12)
21	294 14.1	(6)		
23	294 47.5	(6)	46.9	(9)
Mean 1863.22	294 54	(30)	45.8	(21)

I estimate the small star to be of the 10.5 magnitude.

Measures of the Companion of γ Andromedæ.

By Hermann Romberg.

I attacked this star with Mr. G. Barclay's excellent Refractor, during the winter, on several occasions, but was never very successful; but since the 17th of February, shortly after sunset, the star was shown clearly divided every time I looked at it with powers 750, 500, and 330. By means of a roughly introduced spider's line I obtained the following measures of position:—

1863, Feb. 27	107 41	(12)
Mar. 18	105 43	(6)
19	107 10	(4)
Mean 1863.20	107 3	(22)

I estimated the distance to be about $0''\cdot6$, and the magnitudes of the stars 5 and 6.5.

*Mr. Gurney Barclay's Observatory,
Leyton, 1863, April 7.*

Observations and Elements of Comet I. 1863.
By Hermann Romberg.

I have obtained the following observations of the Comet I., 1863:—

	M.G.T. h m s	$\Delta\alpha$ Comet—Star.	$\Delta\delta$ Comet—Star.	a b c d
		m s	m s	
1863, Jan. 11	15 55 59.5	+9 15.230	+5 13.5	a b c
	20 17 51 59.4	0 41.951	+7 9.4	
	24 17 58 35.5	1 36.834	+4 54.3	
Feb. 3	16 59 16.0	0 17.832	-4 30.0	d
	17 39 9.5	+0 22.540	-5 18.1	

The apparent places of the stars of comparison for the date of observation are,

(a)	17 41 19.20	+38° 56' 8.5	Radcl.
(b)	19 16 28	34 2 0	Lal.
(c)	19 38 21.41	31 45 11.7	B. Z.
(d)	20 17 5.88	+26 41 30.8	B. Z.

The star (b) is given in Argelander's Northern Zones, Zon. +34°.

On Feb. 3d I compared the Comet with another star, and obtained, for the above times,

Feb. 3	$\Delta\alpha$	$\Delta\delta$
	m s	m s
	-1 34.568	-3 20.2
	-1 29.660	4 11.1
18 ^h 22 ^m 50 ^s .0	-1 24.547	-5 6.1

The apparent place of this latter star is nearly

$$20^h 18^m 28^s.19 \quad +26^\circ 40' 22''.$$

The differences in Right Ascension and Declination are corrected for Refraction and Parallax; they are the means of at least six transits. The Comet's appearance was round and faint; but I discerned from the 20th of February a faint nucleus, which had on the 3d of February increased consider-